ENGINEERING TECHNICIAN

FLSA STATUS:

Non-Exempt

CLASS SUMMARY:

The Engineering Technician is the second level in a four level Engineering Support series. Incumbents are responsible for performing paraprofessional work in support of engineering or project management activities, including gathering technical data, performing the full range of survey work, conducting field work, developing GIS data, reviewing construction plans for code compliance, conducting construction inspection, providing information to customers, and interpreting and reviewing legal descriptions and other related documents.

Distinguishing characteristics within the class, based upon assignment are, performing responsibilities focused on construction review and inspection, surveying, or assisting with traffic studies.

The Engineering Technician is distinguished from the Engineering Aide by its responsibility for performing paraprofessional support of engineering or project management activities. The Engineering Technician is distinguished from the Senior Engineering Technician, which as lead worker is responsible for making work assignments, overseeing the work of other technicians, training, ordering and distributing supplies, preparing reports, and performing administrative tasks in the absence of the supervisor.

TYPICAL CLASS ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)		FRE- QUENCY
1.	Performs technical engineering support tasks and assisting in a variety of engineering projects which, depending on assignment, may include: utilizing computer-aided design (CAD) or related software in design activities; reviewing and analyzing permits, applications, and site plans for compliance with specified standards; preparing final design drawings, conceptualizing designs and preliminary layouts; assisting with final inspections and acceptance of engineering projects; participating in engineering designs and performing related calculations; building and maintaining "Right of Way" line work; estimating project quantities; planning for and obtaining traffic counts; coordinating construction activities and serving as a liaison for construction projects; assisting in resolving engineering-related problems; and performing other related activities.	Daily 25%
2.	Drafts and finalizes engineering designs utilizing Computer Aided Drafting (CAD) or related software; creates a variety of exhibits, including maps, drawings, renderings, photo layouts, and/or other applicable displays.	Daily 25%
3.	Participates in a variety of meetings, work groups, and/or other related groups in order to receive and convey information.	Weekly 5%

ENGINEERING TECHNICIAN

TYPICAL CLASS ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)		FRE- QUENCY
4.	Prepares, completes, and maintains a variety of forms, reports, correspondence, civil engineering design drawings, contract documents, project lists, and/or other related items.	Daily 10%
5.	Assists internal staff and customers with requests for information regarding division operations, processes, policies, and procedures.	Daily 10%
6.	Prepares and processes permits in assigned area of responsibility.	Daily 10%
7.	Creates and maintains engineering related databases.	Daily 5%
8.	Prepares and reviews legal descriptions under the supervision of a Professional Engineer in support of engineering projects and activities.	Weekly 5%
9.	May participate in surveying activities, which includes: using Global Positioning System (GPS) for locating and measuring necessary information; collecting survey data; assists with conducting land surveys to determine precise location and measurements; assisting in field design of projects; operating and maintaining a variety of tools and equipment applicable to the trade; and, performing other related activities.	Varies 0 – 5%
10.	Performs other duties of a similar nature or level.	As Required

POSITION SPECIFIC RESPONSIBILITIES MIGHT INCLUDE:

Positions assigned to Surveying may be responsible for:

- Assisting with performing survey and layout work on engineering and mapping projects;
- Assisting with performing construction and preliminary surveys.

Positions assigned to Engineering Inspection may be responsible for:

 Inspecting a wide variety of construction projects involving municipal facilities and property, including street and building construction, parking lots, bridges, culverts, sanitary sewer systems, lift stations, storm drainage systems, water main systems, irrigation canals and pipelines, street lighting, and traffic signals.

ENGINEERING TECHNICIAN

Training and Experience (positions in this class typically require):

High School Diploma, or GED, and college level coursework in a related field and two
years of experience in Construction, Surveying, Engineering Technology, or other
related engineering support experience are required;

OR

 An equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

<u>Licensing Requirements</u> (positions in this class typically require):

Basic Class C License

Knowledge (position requirements at entry):

Knowledge of:

- Customer service policies, principles and practices
- Applicable tools and equipment utilized in assigned area of responsibility
- Mathematical concepts
- Engineering maps, records, symbols, and nomenclatures
- Engineering terminology in assigned area of responsibility
- Technical engineering principles in assigned area of responsibility
- Applicable Federal, State, and Local laws, codes, ordinances, rules, and regulations

Skills (position requirements at entry):

Skill in:

- Performing manual labor under different conditions
- Preparing and performing mathematical calculations
- Providing customer service;
- Using and caring for applicable tools, equipment, and vehicles;
- Reading and interpreting engineering maps and records;
- Assists in preparing and interpreting property descriptions;
- Safely operating and maintaining applicable tools and equipment
- Using computers and applicable software applications
- Utilizing AutoCAD and/or related software;
- Interpreting, applying and explaining applicable laws, codes, ordinances, policies, procedures, rules and regulations

ENGINEERING TECHNICIAN

Physical Requirements:

Positions in this class typically require: feeling, finger dexterity, grasping, hearing, repetitive motions, seeing, talking, bending, kneeling, lifting, reaching, standing, stooping, walking, balancing, climbing, crawling and crouching.

Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

Incumbents may be subjected to moving mechanical parts, electrical hazards, vibrations, fumes, odors, dusts, poor ventilation, adverse weather conditions, environmental hazards, gasses, chemicals, oils, work space restrictions, inadequate lighting, intense noises and travel.

Note:

The above job specification is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

Classification History:

Draft prepared by Fox Lawson & Associates (LM)

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Reviewed by the City of Fresno

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